

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

Luminati Networks Ltd.,

**Plaintiff,**

v.

**Code200, UAB, Oxysales, UAB, and  
Metacluster LT, UAB,**

**Defendants.**

**Civil Action No.  
2:19-cv-00396-JRG**

**OXYLABS' RESPONSIVE CLAIM CONSTRUCTION BRIEF**

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Defendants Code200, UAB, Oxysales, UAB, and Metacluster LT, UAB (collectively, “Oxylabs”) file this Responsive Claim Construction Brief:

## I. INTRODUCTION

Luminati admits that the Court recently construed “client device” in *Teso*<sup>1</sup> for related patents with the same specification. Br. (ECF No. 86) at 9. There is no reason to depart from the Court’s prior claim construction, and Oxylabs asserts that the Court should again construe “client device” as a “communication device that is operating in the role of a client.” With respect to the “server” terms, Luminati seeks to add unwarranted limitations that are contrary to the claim language. The “server” terms do not need any construction.

It is particularly noteworthy that Luminati seeks to add an entirely new method step to claim 1 of the ’968 Patent by seeking to construe “second server” as a server that “fetches the first content using the selected IP address” from the web server. That is a plainly improper attempt to rewrite claim 1, as discussed in Section II.C below, by adding a new “fetch[ing]” claim step. And, as discussed below in Sections III.D and III.E, Luminati’s true motivation for its attempted claim amendment is to save claim 1 of the ’968 Patent from indefiniteness, because Luminati’s validity argument depends on its view that claim 1 should be read as if it includes a “fetch[ing]” step between the second server and web server that simply is not in the claim. It is far too late for claim amendments and patent prosecution, and Luminati instead must live with the claims that it filed in its patent applications less than two years ago.

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<sup>1</sup> *Luminati Networks Ltd. v. Teso LT, UAB et al.*, Case No. 2:19-cv-395-JRG (E.D. Tex.) (“*Teso*”).

## II. DISPUTED CLAIM CONSTRUCTION TERMS

### A. Client Device ('968 and '511 Patents)

The Court already construed the *identical* term “client device” in *Teso* as “communication device that is operating in the role of a client,” based on the *identical* specification of two patents (the ’319 and ’510 Patents) that are related to the ’968 and ’511 Asserted Patents. While Luminati concedes this point (Br. at 9), it then repeats (*id.* at 10-13) the same failed arguments that it made in *Teso* regarding “client device” as an alleged “consumer computer.”

The Court has already found that “the language on which Luminati relies is not sufficient to redefine the meaning of the term to ‘consumer computer,’” and rejected Luminati’s argument “that a client device is specifically not a server.” ECF No. 86-4 (Lum. Br. Ex. D) at 11. Notably, the Court’s construction of “client device” in *Teso* to refer to the device’s role is consistent with the Court’s construction of the same term in another prior case between the parties (*Tesonet*, 18-cv-00299-JRG (E.D. Tex.)), where the Court construed “client device” to mean “a device that is operating in the role of a client by requesting services, functionalities, or resources from other devices.” Ex. 1 (ECF No. 121 (cv-299 case)) at 51. In so doing, the Court noted in *Tesonet* that Luminati “submitted a technical definition of ‘client’ as meaning ‘[a] computer system or process that requests a service of another computer system or process.’” *Id.* at 50. As noted below, Luminati resubmitted the same definition in this case. The Court therefore has **twice rejected** Luminati’s proposed claim constructions for “client device,” and has twice construed “client device” in accordance with its role.

The Court should again construe “client device” as a “communication device that is operating in the role of a client” and reject Luminati’s “consumer computer” construction for the same reasons it did in *Teso* for the related patents. *See* ECF No. 86-4 at 10-12. Oxylabs believes that such a construction is, in fact, the plain and ordinary meaning of “client device” and notes

that Luminati has also proposed such a construction as its new “alternative” construction and conceded that such construction would be an “acceptable” alternative. Br. at 10, 13. As Oxylabs has previously asserted, such a role-based construction by a communication device is the only reasonable construction.

**First**, the Asserted Patents<sup>2</sup> confirm that “*each communication device may serve as a client, peer, or agent*” in a portion of the specification quoted and emphasized by Luminati (Br. at 11).<sup>3</sup> ’511 Pat. at 4:49-51. Luminati, however, did not emphasize the next sentence of the specification stating that “*a detailed description of a communication device* is provided with regard to the description of FIG. 4.” *Id.* at 4:53-55. The corresponding description of Figure 4 describes the “communication device” in detail and confirms that the “communication device” “contains general components of a computer” and “may serve as a client, agent, or peer.” *Id.* at 5:54-59.

“[T]he communication device 200 includes a processor 202, memory 210, [and] at least one storage device 208 . . .” *Id.* at 5:60-62. The specification also confirms other standard features of the “communication device,” including that its memory may include “ROM, hard drive, tape, CDROM, etc.” and that its input/output devices may include “a keyboard, mouse, scanner, microphone, etc.” or a printer. *Id.* at 6:18-21, 6:63-67. The communication device also includes “an operating system (O/S).” *Id.* at 6:33-35.

The Asserted Patents therefore disclose general purpose computers, such as those with standard computing processors, operating systems, memory, and storage devices such as hard drives, that serve in the claimed roles shown in Figure 3—client, peer, or agent. The specifica-

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<sup>2</sup> The ’968 patent and ’511 patent share a common specification. Citations herein are to the ’511 patent unless otherwise noted, but should be understood to include the corresponding citation to the ’968 Patent.

<sup>3</sup> Unless otherwise noted, all emphases in quotations in this brief have been added.

tion does not suggest that the “client device” is comprised of special computer equipment—“consumer” or otherwise—and instead it is crystal clear that “client device” is made up of “general components” of a standard computer.

Further, the specification explains that a “client module,” “peer module” or “agent module” of an application on a communication device may “come[] into play *according to the specific role* that the communication device 200 is partaking in the communication network 100 at a given time.” *Id.* at 9:21-27. The “client module” provides functionality, for example, “when the communication device 200 is requesting information from the Web server” and the “peer module” provides functionality, for example, that is “required by the communication device 200 when answering other clients within the communication network 100.” *Id.* at 9:28-37, 9:38-40.

**Second,** Luminati admitted with respect to the related ’319 and ’510 patents that the general computer equipment described in the specification, and discussed above, may serve as a client or server, thereby conceding that whether something is a “client” or “server” depends on the role it performs at a given time. Luminati filed a brief in the Teso case arguing, using color coding, that the “first client device” (for which Luminati uses red font in its brief) of the ’319 Patent is depicted by the “agent” box and the “second server” (for which Luminati uses green font in its brief) is depicted by the “client” box in Figure 3:

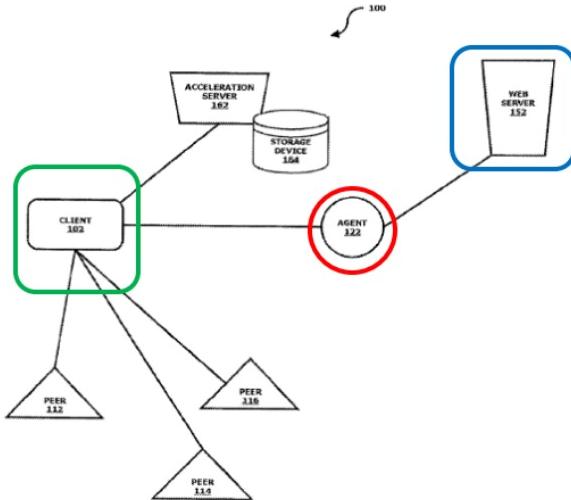


FIG. 3

*Teso*, ECF No. 28 at 14-15. Luminati therefore understands that a “server” and “client” are broad enough to encompass the same equipment, particularly given that the “client” and “agent” functionality of Figure 3—discussed above—is performed by the standard computer equipment discussed in the patent. Luminati’s admission—which stems from the patent specification itself—is consistent with the Court’s claim construction in *Teso* that the specification does not support the argument “that a client device is specifically not a server.” ECF No. 86-4 at 11.

**Third**, the points discussed above merely confirm what would already be known to a POSA—namely that “client” or “server” terminology defines a role and not a special type of equipment. Luminati’s own citations of extrinsic evidence readily establish this point, making it difficult to understand how Luminati can now contest the issue again. Among other things, Luminati cited the following in its portion of the Patent L.R. 4-3 Joint Claim Construction chart for “client device”:

RFC 1983 at 11: Definition of “client”: A computer system or process that *requests* a service of another computer system or process. A workstation *requesting* the contents of a file from a file server is a client of the file server.

W3 Glossary of Terms for Device Independence at 2: Definition of “Client”: The *role* adopted by an application when it is retrieving and/or rendering resources or resource manifestations.

IEV ref 732-01-12 definition of “client”: “*functional unit that requests and receives services from a server.*”

ECF No. 71-1 (Joint Cl. Constr. Chart) at 17, 19. These Luminati-proffered definitions confirm that a “client” device refers to the *role* of the device, not to special equipment.

Oxylabs’ expert, Dr. Freedman, agrees that a “client” refers to a role in a specific protocol or application, such as a communication device that is operating in the role of a client. Freedman Decl., ¶¶ 39-45. As Dr. Freedman notes, the Asserted Patents also refer to the use of the HTTP protocol, which is defined by the protocol RFC 2616 (HTTP/1.1) released by the Internet Engineering Task Force in 1999. *Id.* at ¶¶ 30-31. Further, the patents expressly cite to RFC 2616. ’511 Pat. at 16:22. RFC 2616 confirms the role-based usage of “client” and “server.” For example, RFC 2616 defines a “client” as “[a] program that establishes connections for the purpose of sending requests,” while a “server” is defined as “[a]n application program that accepts connections in order to service requests by sending back responses.” Ex. 2 (RFC 2616) at § 1.3. RFC 2616 also confirms that “client” and “server” refer to roles, and that “[a]ny given program may be capable of being both a client and a server; our use of these terms refers *only to the role being performed* by the program for a particular connection.” *Id.* at § 1.3.

**Fourth**, in contrast to the sheer weight of the evidence discussed above, Luminati points to three lines of the patent specification at 2:44-46<sup>4</sup> that refer in passing to “computers of consumers” related to prior art. Br. at 10. The Court already considered this argument and expressly

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<sup>4</sup> Luminati’s citation to 2:44-46 of the ’511 Patent is in error and should have been to 2:47-49. The same quotation was found at 2:44-46 of the ’319 Patent and was considered by the Court in the Claim Construction Order in *Teso*.

determined that it *does not* redefine “client device” as “consumer computer.” ECF No. 86-4 at 10-11. “Notably,” as the Court determined, “‘consumer’ does *not* appear in connection with the description of the claimed inventions, and the lines on which Luminati relies are not a clear and explicit statement by the patentee for the disputed term.” *Id.* at 11 (emphasis in original).

Indeed, the patent specification at various places refers to a *prior art* peer-to-peer network. For example, patent Figure 2, which refers to the network 50, “provid[es] a prior art example of a peer-to-peer file transfer network.” ’511 Pat. at 4:3-4. The portion of the patent specification cited by Luminati (Br. at 10), discusses the network 50 of a “peer-to-peer file transfer network” (such as BitTorrent) which is mentioned as an example of such a network at 2:46. The patent then states that, in the prior art “network 50, files are stored on computers of consumers, referred to herein as client devices 60.” ’511 Pat. at 2:47-49.

Therefore, the files in the prior art network 50 of the “peer-to-peer” system are stored on computers of consumers. Such consumer computers from the prior art may indeed fall within the scope of “client devices” further discussed in the Asserted Patents, but this does not indicate to a POSA that “client device” has been clearly redefined to mean a “consumer computer” of the prior art. Freedman Decl., ¶ 45; *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1368 (Fed. Cir. 2012) (noting lexicography requires “a clear and explicit statement by the patentee” and any “‘implied’ redefinition must be so clear that it equates to an explicit one”). Nor do the Asserted Patents otherwise redefine “client device” in such a manner.

Further, as the Court noted in *Teso*, “[a]s used by the specification, ‘consumer’ simply means a consumer of content, as opposed to a broadcaster of that content.” ECF No. 86-4 at 11 (citing to patent specification corresponding to ’511 Pat. at 1:57-60 and 1:61-62). This is consistent with the ordinary understanding of “consumer” as meaning “one that utilizes economic

goods.”<sup>5</sup> Luminati does not explain what a “consumer” computer would be, to the extent that it is different from the general-purpose computer equipment discussed above that the patent describes as providing the functionality of a “client device.”

In sum, the patent specification, the extrinsic evidence, the Court’s claim construction ruling in *Teso*, and Luminati’s own statements confirm that “client device” should have its plain and ordinary meaning of a communication device operating in the role of a client.

#### **B. First Server (’511 Patent)**

The term “first server” is used in claim 1 of the ’511 Patent. Claim 1 recites in the limiting preamble that the “first server [] stores a group of IP addresses” and further recites that the “first server” performs certain method steps. “First server” means just that—“first server”—and does not need any construction. Luminati seeks to redefine “first server” to be “[a] server, separate from the web server, with a database of IP addresses.” Br. at 13. Notably, Luminati does not cite to any portion of the specification requiring such a redefinition.

As to the phrase “separate from the web server,” Luminati’s proposed addition is unnecessary. Claim 1 already recites that the “first server,” among other things, sends or receives information to/from a “web server.” Therefore, to the extent that Luminati’s proposed “separate from the web server” phrase means that the “first server” is a component that communicates with a web server, claim 1 already recites such a limitation and Luminati’s proposed addition would be redundant. To the extent that the phrase means something different, then it is unsupported by claim 1 and inappropriate for use in the construction. *See also* Freedman Decl., ¶¶ 20-35.

Luminati’s proposed addition of the limitation “with a database of IP addresses” is more concerning because it is plainly an attempt to change the claim language, which claim language

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<sup>5</sup> See, e.g., <https://www.merriam-webster.com/dictionary/consumer>.

was drafted by the patentee less than two years ago. Claim 1 already describes the relationship between the “first server” and “IP addresses,” namely that the first server “stores a group of IP addresses.” ’511 Pat., claim 1. Claim 1 does not require that the “first server” is “with *a database* of IP addresses,” yet that is how Luminati seeks to rewrite the claim language. Luminati does not explain how the use of a database of IP addresses would differ, if at all, from what the claim requires (storing a group of IP addresses). Notably, Luminati does not even attempt to offer any argument that the patent claim(s) or specification redefines or expressly limits “first server” to including “a database of IP addresses.” *See* Br. at 13.

### C. Second Server ('968 Patent)

The term “second server” is used in claim 1 of the ’968 Patent, which recites in the limiting preamble that the “second server” is “distinct from the first web server and identified in the Internet by a second IP address” and further recites that the “second server” performs certain method steps. “Second server” means just that—“second server”—and does not need any construction. Luminati seeks to redefine “second server” as “[a] server, separate from the first web server, that fetches the first content using the selected IP address.” Br. at 14. Luminati does not cite to any portion of the specification requiring such a redefinition. *See also* Freedman Decl., ¶¶ 46-51.

Luminati’s first proposed addition, that the “second server” is “separate” from the web server, is different from what claim 1 recites. Claim 1 recites that the “second server” is “distinct” from the first web server. “Distinct” does not necessarily mean “separate,” and Luminati offers no argument or evidence that they are the same. If the patentee wished to recite that the “second server” is “separate” (rather than “distinct”) from the first web server, the patentee could have done so.

Luminati’s second proposed addition—that the “second server” allegedly “fetches the

first content using the selected IP address”—is more problematic because it would result in a wholesale redrafting of claim 1 of the ’968 Patent even though the patentee drafted the issued claims less than two years ago. Claim 1 recites four method steps that require the client device to identify, select, send, and receive certain information.<sup>6</sup> Notably absent is any step requiring the “second server” to fetch the first content from the web server using the selected IP address. *See also* Br. at 15 (interpreting claim “to mean that the selected IP address was used by the second server in fetching the first content from the web server”). Through its proposed construction, Luminati seeks to rewrite<sup>7</sup> the claim as shown below in red, underlined text:

identifying, by the requesting client device, an HTTP or HTTPS request for the first content;

selecting, by the requesting client device, an IP address from the list;

sending, by the requesting client device, to the second server using the second IP address over the Internet in response to the identifying and the selecting, the first content identifier and the selected IP address;

fetching, by the second server, the first content from the web server using the selected IP address; and

receiving, by the requesting client device, over the Internet in response to the sending, from the second server using the selected IP address, the first content.

It is too late for claim drafting. The patentee could have, but did not, recite a claim limitation requiring the second server to “fetch[]” the first content using the selected IP address. Again, Luminati provides no basis in the claim(s) or specification to redefine “second server” as fetching the first content using the selected IP address, nor can it. Indeed, the term “second server” is never used in the written description, but only in the claims.

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<sup>6</sup> Luminati incorrectly quotes claim 1 of the ’968 Patent by reciting the “selecting” step twice. Br. at 14.

<sup>7</sup> As discussed below in Section III.D, Luminati’s proposed rewrite is also inconsistent with the patent specification, which discusses the possibility of a proxy device serving as a cache, such that it does not necessarily need to retrieve content from a web server.

### III. INDEFINITENESS

Luminati argues that “Defendants have not asserted that any of the following claims lack meaning,” such that the Court should not find indefiniteness. Br. at 17. Oxylabs does not know what Luminati means by “lack meaning” in this context. The test is whether the claims, read in light of the specification and prosecution history, inform a person of skill in the art of the scope of the invention with reasonable certainty. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). All of Oxylabs’ indefiniteness arguments are unquestionably based on its assertion that the claim limitations at issue fail to inform a POSA of the scope of the invention with reasonable certainty. Luminati’s argument that Oxylabs has not argued that the claims “lack meaning,” which argument Luminati fails to explain, is thus in error.

#### A. **Indefiniteness of “sending . . . to the web server using the selected IP address” ('511 Patent (claim 1))**

Claim 1 of the '511 Patent recites, among other things, that the first server selects an IP address from the group, and then sends, “in response to the selecting, the first content identifier to the web server using the selected IP address.” The claim, however, does not define how the first server sends the first content identifier to the web server “using the selected IP address.” It would not make sense to a POSA to say that any information is sent “using” a selected IP address without further detail. Freedman Decl., ¶¶ 52-68.

There are many potential, yet conflicting, ways to interpret an IP address being “us[ed]” by the first server, as discussed below. Importantly, what Oxylabs discusses below is an issue of indefiniteness, **not claim breadth**, because a POSA cannot determine—without further information—what it means for the selected IP address to be “us[ed]” because of the multiple, different ways a POSA could understand an IP address to potentially be used.

For example, if one were to claim a method of driving a car to the grocery store “using

light,” the claim would not make sense. To be sure, there are many potential—and competing—ways the claim could potentially be interpreted as to “using light,” including (i) driving when it is daylight, (ii) driving using headlights, (iii) using LED lights for the instrument panel, or even (iv) driving an electric vehicle charged with electricity that was derived from sunlight (solar). But this would not simply mean the claim is broad—instead, the problem is a failure to define the scope of the invention with reasonable certainty because of vague and confusing claim language.

The same is true here. In the context of claim 1 of the ’511 Patent, given the vague claim language, a POSA would not understand how the selected IP address is “us[ed]” to send the first content identifier to the web server, and instead there would be multiple, competing potential interpretations. The selected IP address might be used in the sense that the first server sends a request to a proxy device that is identified by the selected IP address. Or the first server could send a request to the web server “using” the selected IP address as the IP address identifying the first server in the communication with the web server. Alternatively, the selected IP address could be the IP address of the web server itself, such that that first server selects an IP address of the web server (i.e., the IP address corresponding to www.google.com) with which the first server wishes to communicate. Freedman Decl., ¶ 56.

Another potential interpretation is that the claim could be referring to a standard DNS (Domain Name System) process, which is a widely-deployed protocol for resolving domain names and other information on the Internet and defined in standards published as early as 1987. *Id.*, ¶ 57. Before sending an HTTP request for a URL to a web server, a web browser first needs to learn the IP address of the web server associated with the URL’s domain or hostname, e.g., the IP address of the domain “www.uscourts.gov.” It does so by resolving the domain name through

the Domain Name System, which provides name resolution for the Internet in a decentralized fashion. *Id.*, ¶ 58. As Dr. Freedman explains, there are different ways to resolve a domain name to an IP address through DNS, but a typical DNS resolver will have the IP addresses about many DNS names stored in its cache. *Id.*, ¶¶ 58-62. Further, an IP address can be resolved by having a local operating system utilize a local DNS resolver. *Id.*, ¶ 60. Therefore, claim 1 could alternatively refer to the use of a decades-old lookup mechanism to retrieve the IP address of the web server to be contacted from a group of IP addresses.

As yet another potential interpretation, there is a common practice of web proxies (such as potentially the first server) that involves including the originating client's IP address in the "X-Forwarded-For" HTTP header in a web request sent to an origin server. This HTTP header is meant to inform the origin server of the identity of the client device for which the request is proxied, e.g., in case the origin server wants to personalize, process, or record information about the web request based on the client's IP address. *Id.*, ¶ 65. Therefore, the claim could be referring to the "us[e]" of the client device's IP address that was selected.

Additionally, the "selected IP address" could correspond to any other device, even if not recited in claim 1, and could be "us[ed]" in any conceivable manner to send the first content identifier to the web server. *Id.*, ¶ 67. The patent specification provides no definition or explanation. In fact, the phrases "selected IP" and "selected IP address" appear only in the claims, and not in the written description of the patent specification.

Luminati makes the conclusory assertion that the IP address would not include the IP address of the web server because "a POSA would understand that the recited URL of the first content would already identify the web server" but then admits in the same sentence that an IP address needs to be "associated with the domain name in the URL." Br. at 19. Luminati admits that

“DNS servers are used” for such a lookup (*id.*), but does not explain—in the absence of any detail in the claim as to how the selected IP address is “us[ed]”—why the first server could not select the IP address of the web server and “us[e]” the selected IP address for sending the content identifier.

Luminati also claims that Oxylabs fails to explain “why the IP address of the client device could be used to send the first content identifier to the web server.” Br. at 19. But Dr. Freedman provided a precise example of that in his Patent L.R. 4-3 disclosure (which Luminati received well in advance of its brief) and again in his declaration—namely, the common example of using an “X-Forwarded-For” HTTP header, as discussed above. Freedman Decl., ¶ 65.

In sum, a POSA would have no way to know the scope of what it means to “us[e]” the selected IP address within the meaning of claim 1. A POSA therefore would not understand the scope of claim 1 of the ’511 patent with reasonable certainty. None of the claims that depend from claim 1 resolve this indefiniteness, and therefore the dependent claims are indefinite for the same reasons.

#### **B. Indefiniteness of “a response time when communicating” (’511 Patent (claim 17), ’968 Patent (claim 2))**

Claim 17 of the ’511 Patent recites that “the criterion is based on, or comprises, *a response time when communicating.*”<sup>8</sup> Claim 2 of the ’968 Patent recites the method of claim 1 “wherein the selecting is further based on *a response time when communicating* with the requesting client device.” The patent specification does not provide any definition or guidance with respect to “a response time when communicating.” The term “response time” is used only once in each Asserted Patent, in the above two claims. As discussed below, the patents fail to inform a

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<sup>8</sup> Claim 17 depends from claim 14, which recites that the method of claim 1 is “for use with a criterion stored in the first server, wherein the selecting is according to, or based on, the criterion.”

POSA of the scope of “a response time when communicating,” such that the problem is one of indefiniteness, not breadth.

### **1. Claim 17 ('511 Patent)**

Addressing claim 17 ('511 Patent) first, a POSA would understand that claim 17 could relate to any component recited in claim 1, or even to any other component not recited in claim 1. Even if the component in question were identified, a POSA would not understand what the component is responding to or otherwise what “response time” is being referenced. A POSA also would not understand what the device is “communicating” with, or which communicating device’s “response time” is to be assessed, to the extent that is what the claim is intended to reference.

The “response time when communicating” could conceivably refer to any of the three devices recited in claim 1: the first client device, first server, or web server. The claim’s failure to identify the component or device that is being measured for a “response time” renders it indefinite. If Luminati asserts that claim 1 could include an additional web proxy (not expressly disclosed in claim 1) that is represented by the selected IP address, this would only introduce a fourth device and further add to the ambiguity of claim 17.

Even if a POSA knew the device to which the “response time when communicating” refers, a POSA would still have no understanding of the scope of this claim phrase. A POSA would not know which “response time when communicating” is to be measured, or how it is measured. Freedman Decl., ¶¶ 69-77. As an example of the indefiniteness, the phrase could potentially be the one-way latency to send a response from one device to another device, or could potentially involve the “round trip time” latency from one device to send a request to another device, and for that device to send a corresponding response back. *Id.*, ¶ 75. Alternatively, the phrase could refer to the total time to transmit a file or web content (so that it could be ultimately

received by the first server and/or client and displayed to the user). This distinction is relevant, as two devices could have lower latency between them but also lower throughput (and thus take longer to transmit the web content), while a network path to a different device could have higher latency but also higher throughput (and thus take less time to transmit the web content). *Id.* Further, it is unclear between which devices this response time should be measured. For example, if a web proxy (represented by the selected IP address) were disclosed by claim 1, it is unclear whether the response time disclosed in claim 17 corresponds to the response time from the web server to the web proxy, or between the web proxy to the first server, or between the web server to the first server (via the web proxy), or a response time relating to another device. Similarly, if the time is meant to be round-trip rather than one-way, it is unclear whether the response time is from the web proxy to the web server and back again, from the first server to the web proxy and back again, or from the first server to the web server and back again (both via the web proxy), or a response time relating to another device. *Id.*

Further, and again assuming a POSA knew the device to which the “response time when communicating” refers, the claim references “when communicating.” A device could communicate with many other devices, and its “response time” (depending on how it is defined) could change depending on the other device with which the first device is communicating. *Id.*, ¶ 76.

Luminati has no answer to any of these questions. Luminati asserts that a POSA would understand “a response time when communicating” as “referring to the IP addresses from the group,” and that a POSA “would not understand ‘a response time when communicating’ to be limited to one specific communication but to relate instead, as claimed, to the act of communicating between devices.” Br. at 20-21 (quoting from Luminati’s Ex. C). Luminati’s vague explanation merely raises additional questions. Given that the claim limitation refers to “a response

time when communicating,” what response time is Luminati identifying when it references “IP addresses from the group”? Which devices’ communications are being measured for purposes of the “response time”? What does Luminati mean by “the act of communicating between devices”? And how is the “response time” measured?

Luminati’s vague statements reinforce the ambiguity and indefiniteness of the claim phrase “a response time when communicating.”

## **2. Claim 2 ('968 Patent)**

The discussion above regarding claim 17 ('511 Patent) applies to claim 2 of the '968 Patent and similarly reveals the indefiniteness of claim 2. Claim 2 recites that the “response time when communicating” is “with the requesting client device,” but that does not resolve the indefiniteness problems discussed immediately above. Claim 2 does not inform a POSA what device or component is communicating with the requesting client device for purposes of the claim. Further, claim 2 does not even inform a POSA whether the “response time” concerns the requesting client device’s response time, the response time of the unidentified device communicating with the requesting client device, or the response time of another unrelated device or component. And as discussed above with claim 17 ('511 Patent), the patent fails to inform a POSA of what “response time” is being measured or how it is measured, regardless of what device the claim is referencing. Freedman Decl., ¶¶ 101-04.

## **C. Indefiniteness of “source address” ('511 Patent (claim 25))**

Claim 25 of the '511 patent recites: “The method according to claim 1, wherein the sending of the first content identifier to the web server comprises *using the selected IP address as a source address.*” The written description of the patent never uses the phrase “source address,” so a POSA would have no way of knowing the scope that the patentee intends with respect to using the selected IP address as a source address. Freedman Decl., ¶¶ 78-84.

As discussed above in Section III.A, there are multiple conflicting ways the claim could be interpreted for purposes of “using” the selected IP address. The term “source address” in claim 1 does not define any particular usage. A POSA would understand that the patentee could be using “source” to refer to the source of the requested content that is recited in claim 1. Therefore, the selected IP address could refer to the IP address of the web server, which could be the “source” of the content. Freedman Decl., ¶ 81.

Alternatively, “source” could refer to the source of the content *request* that is sent to the web server, such that “source” could alternatively refer to (i) the first client device, which could be the ultimate source of the content request, (ii) the first server, which could be the source of the content request sent to the web server, (iii) an unrecited proxy device that could potentially be “us[ed]” by the first server to send the request, or (iv) some other IP address of an unrecited device that could be said to be a “source” of the content request. In each of these cases, the “source” address could alternatively be transmitted in TCP/IP headers or HTTP headers. *Id.*, ¶ 82. For example, by looking at the IP headers of received packets, the web server could learn the IP address of the sender directly communicating with it (e.g., the first server or some web proxy device), or a web proxy device could learn the IP address of the first server. Alternatively, by looking at information carried in an “X-Forwarded-For” HTTP header (or some other similar HTTP header), as discussed above in Section III.A, the web server and/or a web proxy device could learn the IP address of the client device. A POSA would understand that both practices are commonly taken by web proxies and web servers, and claim 25 does not provide a POSA with any reasonable certainty between which scenario it recites. *Id.*

Even though the above ambiguity was raised in Oxylabs’ Patent L.R. 4-3 expert disclosure well in advance of Luminati’s claim construction brief, Luminati fails to address any of

these issues. Instead, Luminati simply quotes from Dr. Rhyne to assert that “a POSA would understand the selected IP address to be used as a source address for ‘the sending of the first content identifier to the web server,’” or that “a POSA would understand using the selected IP address to appear as the source IP address in sending the first content identifier to the web server.” Br. at 21. Those statements simply rehash the claim language but fail to explain what the “source address”—which is never used in the patent specification other than in claim 25—is intended to reference. At the most basic level, Luminati fails to explain whether “source address” refers to the source of *the content* or the source of *the content request*, which are two very different things.

A POSA accordingly would not understand the scope of claim 25, and the Court should invalidate the claim as indefinite.

**D. Indefiniteness of “for use with a first web server that is a HTTP or HTTPS server that respectively responds to HTTP or HTTPS requests and stores a first content identified by a first content identifier” (’968 Patent (claim 1))**

The limiting preamble of claim 1 of the ’968 patent recites that the method is “for use” with a number of items: (i) a requesting client device, (ii) a first web server, (iii) a second server, and (iv) a list of IP addresses. The method steps that follow go on to recite steps in which the requesting client device, second server, and list of IP addresses are used, *but the first web server is never mentioned again*. Therefore, even though the preamble requires that the method must be “for use with a first web server that is a HTTP or HTTPS server that respectively responds to HTTP or HTTPS requests and stores a first content identified by a first content identifier,” the patentee neglected to recite how the first web server is “use[d].” As discussed below, Luminati’s attempt to salvage this claim depends upon its same flawed attempt to write a new “fetching” step into claim 1, as already discussed above in Section II.C with respect to “second server.”

In the absence of any guidance in the claim regarding the “use” of the first web server, a

POSA would have no reasonable way to ascertain the scope of the claim. Freedman Decl., ¶¶ 85-90. There would be a nearly endless list of ways a web server could be “used” if such use is not tied to a recited method step or otherwise defined in the claim. Further complicating matters is the fact that claim 1, while purporting to list a series of method steps defining what devices communicate via content requests and/or exchanges of content, skips any claim steps about how the “first content” is obtained, or from what it is obtained. Instead, the claim recites that the requesting client device sends the content identifier and selected IP address to the second server, and then recites that the requesting client device receives the content from the second server “using the selected IP address.” Claim 1 fails to recite how the second server obtains the content, including whether the second server already possesses the content.

In other words, the patentee did not recite a method step requiring the second server to obtain the content from the first web server. The claim does not recite whether the web server provides the first content to the second server or to any other device. Indeed, the web server could conceivably receive the first content from the client device *after* the client device obtains the first content, and then store the content. The web server could also have a separate copy of the first content, regardless of how the client device or second server obtains the content. Or the web server could have some other undefined relationship with the client device, second server, or another device, such that it could be deemed “use[d].” Freedman Decl., ¶ 89.

Again, this is not an issue of claim breadth or an overly broad claim. The problem is that the claim fails to provide a POSA with any guidance as to how the claimed method is “for use” with a first web server.

Luminati’s response effectively admits the indefiniteness of claim 1. Luminati states that “the recited step of ‘sending, by the requesting client device, to the second server . . . the first

content identifier and the selected IP address’ and ‘receiving, by the requesting client device, over the Internet in response to the sending, from the second server using the selected IP address, the first content” would be understood by a POSA to be “the client device sending the first content identifier *permitting the first content to be fetched from the web server using the selected IP address and returned to the client device.*” Br. at 23. Luminati therefore rewrites the claim to include a new “fetching” limitation in claim 1 so that the second server fetches content from the web server, just as discussed above in Section II.C. Again, Luminati’s argument requires the following addition, shown in red font and underlined:

identifying, by the requesting client device, an HTTP or HTTPS request for the first content;

selecting, by the requesting client device, an IP address from the list;

sending, by the requesting client device, to the second server using the second IP address over the Internet in response to the identifying and the selecting, the first content identifier and the selected IP address;

fetching, by the second server, the first content from the web server using the selected IP address; and

receiving, by the requesting client device, over the Internet in response to the sending, from the second server using the selected IP address, the first content.

Luminati’s attempted claim rewrite is also inconsistent with the patent specification. As the Court already determined when considering the identical specification of the ’319 Patent regarding determining whether content is “valid” (also discussed below in Section III.F), a device may have content in cache that is identical to data on the web server, so that it need not retrieve the content from a web server. ECF No. 86-4 at 18. Therefore, there is no basis for Luminati to seek to rewrite the claim to require a new step of “fetching” content from the web server, because the second server may already possess the cached data.

Regardless, Luminati cannot insert an entirely new limitation into claim 1 at this stage. Instead, the claim as drafted, and not as Luminati seeks to amend it, fails to identify the claim

scope with reasonable certainty. As the Supreme Court has stated, “a patent must be precise enough to afford clear notice of what is claimed, thereby ‘appris[ing] the public of what is still open to them.’” *Nautilus*, 572 U.S. at 909 (quotations omitted). “The patent drafter”—not the Court and not the defendant—“is in the best position to resolve the ambiguity” in the patent claims. *Id.* at 910 (quotations omitted). The patentee here did not do so, and the Court should hold the claim invalid as indefinite.

**E. Indefiniteness of “receiving . . . from the second server using the selected IP address, the first content” (’968 Patent (claim 1))**

In Section III.A above, Oxylabs explains why “sending, in response to the selecting, the first content identifier to the web server *using the selected IP address*,” as recited in claim 1 of the ’511 patent, fails to inform a POSA of the scope of the claim with reasonable certainty. For substantially the same reasons, the same “using the selected IP address” limitation in claim 1 of the ’968 patent, as used in “receiving . . . from the second server using the selected IP address, the first content,” fails to define the claim scope with reasonable certainty.

As claim 1 of the ’968 patent recites in the preamble, the claim is “for use with a list of IP addresses.” The second method step then recites that the requesting client device selects “an IP address from the list,” and, per the third method step, the requesting client device sends to the second server the first content identifier and “the selected IP address.” The next claim limitation, however, does not define how the requesting client device receives the first content from the second server “using the selected IP address.” As discussed in Section III.A, many IP addresses are used for purposes of Internet communications, so it does not make sense to a POSA to simply state that any information is received “using” an IP address. Instead, a claim would need to specify the precise communications with which the IP address is involved, and how it is used.

Freedman Decl., ¶¶ 91-100.

There are many potential—yet conflicting—ways that an IP address could be “us[ed]” by the requesting client device to receive content. The selected IP address could be “us[ed]” in the sense that the second server sends a request to a proxy device that is identified by the selected IP address, and the communication with the proxy is considered to be “us[ed]” by the requesting client device to receive the content from the second server. Alternatively, the second server could send a request to the web server “using” the selected IP address as the IP address identifying the second server in the communication with the web server, such that the selected IP address is “us[ed]” when the content is received by the requesting client device. Alternatively, the selected IP address could be an IP address of the web server itself, such that that second server selects an IP address of the web server with which the second server wishes to communicate. Freedman Decl., ¶ 96.

Alternatively, the IP address (from the list) selected by the requesting client device could simply reflect the requesting client device’s own IP address which is sent to the second server. As a POSA would understand, the client device would have more than one IP address if it has more than one network interface (e.g., both a wired and wireless connection to the Internet). In that manner, the second server could “us[e]” the selected IP address of the requesting client device in the second server’s communications with the requesting client device, such that the requesting client device receives the first content from the second server using the selected IP address (i.e., the IP address of the requesting client device). *Id.*, ¶ 97.

Still further, the IP address (from the list) selected by the requesting client could again reflect the requesting client’s own IP address, but this IP address could then be “us[ed]” by the second server when the second server communicates with another device. As explained in Section III.A above, it was a common practice before the priority date of the ’968 Patent for a web

proxy (potentially such as the second server) to include the IP address of the client originating a web request in an “X-Forwarded-For” HTTP header that the web proxy sends to an upstream server. *Id.*, ¶ 98.

As also discussed above in Section III.A, the “selected IP address” could correspond to any other device, even if not recited in claim 1, and could be “us[ed]” in any conceivable manner for the receiving of the first content from the second server by the requesting client device. The patent specification provides no definition or explanation. As previously noted, the phrases “selected IP” and “selected IP address” appear only in the claims, and not in the specification’s written description. *Id.*, ¶ 99.

Once again, Luminati’s response depends upon its improper attempt to rewrite the claim to include a “fetching” step that is not recited in the claim. For example, Luminati states that “a POSA would understand the recited selected IP address **to be used in fetching the first content** which is subsequently received by the requesting client device.” Br. at 25. Oxylabs illustrates Luminati’s proposed claim amendment above in Sections II.C and III.D. As discussed above, the Court should not allow Luminati to amend claim 1 of the ’968 Patent to add a new “fetching” method step. Instead, the patent drafter should have resolved the ambiguity during prosecution. *Nautilus*, 572 U.S. at 909.

In sum, a POSA would have no way to know the scope of what it means to “us[e]” the selected IP address to receive content from the second server. A POSA therefore would not understand the scope of claim 1 of the ’968 patent with reasonable certainty.

#### F. Indefiniteness of Claims 8 and 9 of the ’968 Patent

Luminati asserts that the Court, in *Teso*, rejected indefiniteness arguments regarding “nearly identical terms.” Br. at 26. Luminati is only partially correct. The Court determined, in *Teso*, that the ’319 and ’510 Patents expressly defined in the specification how content is deter-

mined to be “valid” such that the claim term was not indefinite, and Oxylabs agrees with that determination by the Court. The Court also determined in *Teso* that a claim in the ’510 Patent that included the phrase “the part of, or the whole of” content—similar to claim 8 of the ’968 Patent here—was indefinite where the claim lacked antecedent basis for multiple claim limitations. Therefore, these issues should be separately discussed.

**1. “the received part of, or the whole of, the first content”**

Claim 8 recites “. . . determining, by the requesting client device, that the *received part of, or the whole of*, the first content, is valid.” The claim thereby recites alleged antecedent basis for the phrase, “**the** received part of, or **the** whole of, the first content.” But neither claim 8 nor claim 1 recites any device or component receiving “part of, or the whole of” the first content. Indeed, there is no other reference in either claim 8 or claim 1 to a “part” or “whole” of first content.

In *Teso*, the Court invalidated claim 13 of the ’510 Patent, which recited, among other things, “the sending of the part of, or the whole of, the stored first content.” The Court stated, among other things regarding claim 13, that “Claim 1 does not refer to sending ‘part of, or the whole of,’ any content.” ECF No. 86-4 at 21.

As with claim 13 of the ’510 Patent, neither claim 8 nor claim 1 of the ’968 Patent recites “part of, or the whole of” any content. Because of this lack of antecedent basis, a POSA cannot know what “the received part of, or the whole of” the content is being referenced in the claim, and the claim is indefinite. Dependent claim 9 does not resolve the confusion and is indefinite for the same reason.

**2. Determination that content is “valid”**

If claims 8 and/or 9 are not held invalid as indefinite for the reason discussed immediately above, then the claims’ recitation of the determination of whether content is “valid” must be

addressed. Luminati correctly states that the Court found a nearly identical term not indefinite in *Teso*. Br. at 26. But what the Court actually determined was that the validity of content has a **particular meaning** in the context of the specification. The Court stated that a POSA would conclude from the specification, including the '319 Patent at 9:60-10:03, 14:24-26, and 14:35-38,<sup>9</sup> that “‘validity’ relates to whether the cached data is still identical to the data stored on the server, which goes to the heart of the disclosed subject matter.” ECF No. 86-4 at 18. Further, the patent specification concerns “methods of providing faster and more efficient data communication by storing responses to information requests in cache for future use within the network.” *Id.* The Court noted that Luminati agreed that the claim phrase “requires determining whether the cached data is the same as the data that would have been received directly from the server.” *Id.*

Assuming the determination of whether content is “valid” is similarly construed in this case to be limited to a determination of whether cached data is identical to data stored on the server, per the patent specification, Oxylabs agrees that the claims should be so construed and need not be held indefinite. Given Luminati’s agreement that the determination of validity, in the context of the same specification, concerns a determination regarding cached data, Luminati should be estopped from contesting the same issue.

If, for some reason, the determination of whether content is “valid” is not construed as limited to the determination of whether cached data is identical to data stored on the server, then claims 8 and 9 are invalid for the reasons previously discussed in *Teso*. Specifically, if the determination of validity is not limited to the specification’s disclosure, then the claims do not inform a POSA what is meant by “valid.” Content is “valid” (or not) compared with something

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<sup>9</sup> These citations to the specification correspond to the identical '511 Patent specification at 9:61-10:4, 14:24-26, and 14:35-38.

else. Freedman Decl., ¶¶ 105-112.

Content could be deemed “valid” by being generated by certain trusted origins compared to content generated by untrusted origins—e.g., by validating a digital signature on the content from a set of trusted origins, or simply determining that the content’s authors are from a set of sources deemed reliable. Content could be deemed “valid” by demonstrating that the content generated by an origin has not been modified while in transit, e.g., using cryptographic techniques to ensure the data’s integrity and prevent “man-in-the-middle” attacks. Content could be deemed “valid” by demonstrating that the content has not been accidentally corrupted, either in-transit over the network or while maintained by the client device, e.g., by using techniques like data checksums to validate that the content sent is the same as the content received, or that the content currently cached is the same as the content previously received. Content could be deemed “valid” because it does not include malicious code such as worms, viruses, or trojan horses, compared to content which includes malicious code. Content could be deemed “valid” because it passes certain protection rules, such as it does not include any illicit or indecent materials. Content could be deemed “valid” because its material is truthful. Content could be considered “valid” because it corresponds to that content sought by the client device based on the request (i.e., identified by the first content identifier), as opposed to content that is identified by a different content identifier or that had been requested by a different device. Indeed, there are many criteria, including many other criteria not given as examples here, that could be used to determine whether the content is “valid.” Freedman Decl., ¶ 106.

In sum, neither claim 8 nor claim 1 provides any way for a POSA to know what the received content should be compared to or how it should be evaluated to determine whether it is “valid.” And there is no generally understood benchmark that would tell a POSA whether con-

tent is “valid.” Additionally, with respect to claim 9, the further limitation concerning the “determining” of validity based on “a received HTTP header” does not define or restrict the understanding of how content would be “valid” and therefore does not resolve the issue. For example, claim 9 states that the determining of validity from a “a received HTTP header” is “according to, or based on, IETF RFC 2616.” A POSA would understand, however, that there are many headers defined in RFC 2616. A search for “header” in RFC 2616 returns 646 hits. Freedman Decl., ¶ 115. Further, sections 4.5, 5.3, 6.2, and 7.1 of RFC 2616 define many different HTTP headers. One could not simply refer to an HTTP header and expect a POSA to know which one of the many HTTP headers defined in RFC 2616 is being identified. *Id.*, ¶¶ 115-16.

Accordingly, with respect to the claims’ recitation of determining that content is “valid,” the Court should invalidate the claims as indefinite if the determination is not restricted to whether cached data is identical to data stored on the server, as the Court held in *Teso* and as Luminati conceded in that case.

#### **G. Indefiniteness of “periodically communicating” (’968 Patent (claim 15))**

Claim 15 recites: “The method according to claim 1, further comprising periodically communicating between the second server and the requesting client device.” As Luminati notes, the Court held in *Teso* that “periodically communicating” is not indefinite. Br. at 29. But the Court also determined that the specification does not disclose any need for “regular intervals” of time for “periodically communicating” devices, but that it “*does* describe occasional communication between devices.” *Id.* (emphasis in original). Therefore, a POSA would “understand timing between each instance of communication is not critical.” *Id.*

Oxylabs agrees with the Court that the specification does not support “regular intervals” between communications and does not define timing between each communication, with respect to “periodically communicating.” But if “periodically communicating” refers to occasional

communication, Oxylabs respectfully submits that claim 15 is indefinite. Claim 15 is dependent, and therefore narrower, than claim 1. And claim 1 already recites that the second server and requesting client device communicate at least two times: the requesting client device sends the first content identifier and selected IP address to the second server, and the requesting client device receives from the second server the first content. '968 Pat., claim 1. Claim 15 does not recite how many (if any) additional communications the requesting client device and second server must engage in—beyond the two recited in claim 1—for those devices to communicate “periodically” (assuming “periodically communicating” means “occasionally communicating”). In other words, claim 15 does not define how many communications are required for the communications to be “periodic[]” if two communications are not enough. Because of that failure to define the scope of the invention, the Court should find claim 15 indefinite. Freedman Decl., ¶¶ 118-21.

#### **IV. CONCLUSION**

Oxylabs respectfully requests that the Court find indefiniteness and construe the claims as discussed above.

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Respectfully submitted,



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#### **CERTIFICATE OF SERVICE**

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a) on January 4, 2021. As such, this document was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A).



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